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Title: SIBERIAN INSTITUTE'S INFRASONIC MEASURING STATION

Primary source: Sovetskaya Estoniya, August 14, 1979, No. 186 (10884), p. 3, cols. 1-2

Entire text: Irkutsk -- The sound of ocean surf can be heard in Siberia, at the center of the Asian continent. This posed no difficulty for TASS' Irkutsk correspondent A. Gayday. In the taiga clearing of Badara, where he was, scientists of the Institute of ~~Earth Magnetism, the Ionosphere and Radiowave Propagation of the USSR Academy of Sciences~~, Siberian Branch have set up an original infrasonic measuring station.

Inside the small station one hears the steady hum of electric motors and the measured scratching of recording instruments. Low-frequency sound waves imperceptible to human hearing are being recorded on tape. Scientists will find out later where the waves came from, when they 'show' this recording to a computer. These waves are emitted by oceans and seas, active volcanoes, earthquakes, hurricanes, and celestial bodies falling to the earth. Infrasonic vibrations possess the surprising property of not damping for a long time. They can even circle the globe several times.

"Receiving and recording sounds, inaudible to humans, from the distant Atlantic or Pacific oceans is not a goal in itself for us," says Ye. Ponomarev, head of the high-latitude geophysical research laboratory.

"Infrasonic waves caused by storms or other natural phenomena are capable of affecting the upper atmosphere, its structure and dynamics, and, in particular, the electrically conducting most active layer -- the ionosphere."

Title: GEOPHYSICIST MEASURES SOIL GAS ANOMALIES TO PREDICT EARTHQUAKES

Primary source: Sovetskaya Estoniya, August 14, 1979, No. 186 (10884), p. 3, cols. 2-3

Abstract: The brief article reports that geophysicist Yu. Ryaboshtan of Donetsk has developed a method for predicting the approximate time, force and place of an earthquake by measuring changes in the gas content of the earth's soil layer. The method involves the use of extrasensitive instruments, which Ryaboshtan designed for coal mining work, to measure small doses of gases that are released in the soil when a focus of stress occurs in the earth's depths. By correlating measurements made over several years with occurrences of earthquakes, Ryaboshtan discovered a pattern that reportedly has enabled him to forecast the time of major earthquakes to within one or two days, and up to three weeks in advance. It is noted that the method's practicality is being studied by large scientific groups.

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Author: Borovitskiy, V.

Title: NEW AVIATION INSTRUMENT MEASURES STRUCTURAL FATIGUE

Primary source: Sovetskaya Latviya, August 17, 1979, No. 188 (11091), p. 4, col. 1

Entire text: Material fatigue is a dangerous physical phenomenon which is accompanied by an accumulation in parts of small faults that are invisible to the unaided eye, and it can lead to accidents with machine tools, motor vehicles, airplanes... for diagnosing the impending danger